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OCTOBER, 1991
QUARTERLY
RESIDENTIAL WELL SAMPLING REPORT

IDAHO POLE COMPANY SITE
BOZEMAN, MONTANA

Montana Department of Health and Environmental Sciences
Cogswell Building
Helena, Montana

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DEPARTMENT OF
HEALTH AND ENVIRONMENTAL SCIENCES

STAN STEPHENS, GOVERNOR

FAX #(406) 444-1499

STATE OF MONTANA

OFFICE LOCATION: 836 Front Street
Helena, Montana

MAILING ADDRESS: Cogswell Building
Helena, MT 59620

Solid and Hazardous Waste Bureau
(406) 449-4067

OCTOBER, 1991 QUARTERLY RESIDENTIAL WELL SAMPLING REPORT IDAHO POLE COMPANY SITE - BOZEMAN, MONTANA

Introduction and Background

The Montana Department of Health and Environmental Sciences (MDHES) conducted its first quarterly round of private well groundwater sampling at residences downgradient from the Idaho Pole Company (IPC) Site on October 31, 1991. Sampling activities were conducted in accordance with the MDHES IPC Residential Well Sampling Workplan, September, 1991. Previous quarterly sampling events have been conducted by MDHES contractors and the Environmental Protection Agency (EPA) since commencement of Remedial Investigation activities.

The purpose of sampling was to provide valid laboratory analytical data to determine levels of pentachlorophenol (PCP) in the groundwater supply used by area residents. At this time, sampling is being conducted as an aquifer monitoring program only, and remedial actions to protect human receptors are not currently provided by MDHES. Private well sampling is needed to help determine the full extent of PCP groundwater contamination emanating from the IPC Site, to identify a source of potential health risks to area residents, and to aid in the selection of appropriate remedies for final cleanup and restoration of the aquifer.

Sampling and Laboratory Procedures

Figure 1 shows the eight private wells (Res-1,2,3,4,5,7,8,9) that were sampled during the October round. At least three well volumes were purged from each well to insure that a representative groundwater sample was being drawn from the aquifer. All pertinent sampling information, including date, time, sample number, sample location, sampling method, personnel, and other comments, were documented in a bound field notebook. Representatives from IPC were present to collect split samples. To date, IPC has not provided written results of sampling activities to MDHES.

All MDHES samples were analyzed for PCP by the Chemistry Laboratory Bureau using EPA method 515.1 (see Attachment A). The laboratory performed a blank analysis for this sampling round and no contaminants were detected. Surrogate spikes were also performed and were within recovery limits. MSE, Inc., reviewed the laboratory analytical data and provided MDHES with a data validation summary (Attachment B).

Results

Seven of the private wells sampled did not contain PCP above the method detection limit of .05 micrograms per liter (ug/l). Three samples were collected from one residence (Res 8) from an outside tap, a bathtub tap connected to an in-line reverse osmosis (RO) system, and a kitchen drinking water tap connected to the RO and carbon filtration systems. The outside tap and bathtub tap samples contained PCP at 62.7 ug/l and .291 ug/l, respectively. The sample collected from the outside tap exceeded the EPA's proposed Maximum Contaminant Level of 1.0 ug/l for PCP. All residents were sent a letter describing the results of their well water samples.

MDHES will continue quarterly sampling to help adequately assess seasonal changes in groundwater plume dynamics and amounts of PCP in the groundwater. Further questions regarding sampling activities may be directed to Kevin Kirley, MDHES Project Officer, at 1-800-648-8465.

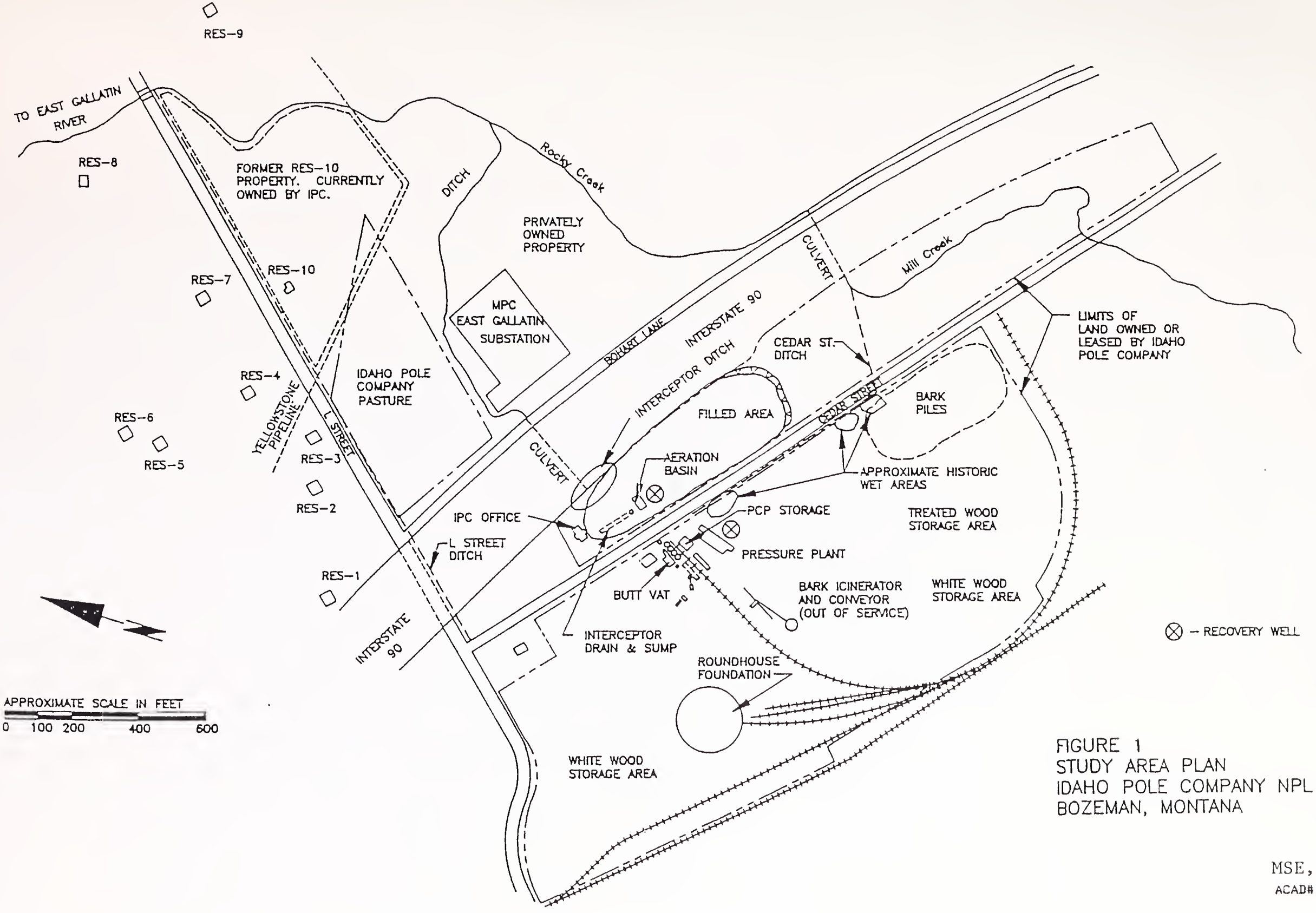

FIGURE 1
STUDY AREA PLAN
IDAHO POLE COMPANY NPL SITE
BOZEMAN, MONTANA

MSE, Inc.
ACAD# B90M0158
3-27-91
REV. -

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ATTACHMENT A

CHEMISTRY LABORATORY BUREAU
Centralized Services Division
Montana Department of Health and Environmental Sciences
ANALYSIS REPORT

RECEIVED
DEC 11 1991
Montana Department of Health and Environmental Sciences
Chemistry Laboratory Bureau

ER: IDAHO POLE CO.

DDRESS: BOZEMAN MT

RCE INFORMATION: SEND RESULTS TO K. KIRLEY, SHWB

E COLLECTED: 10,31,'91 SAMPLED BY J. MICHALSKI

ALYSIS	ACCT		UNITS
15.1	4273-PW-1A	SW 4809	
	4273-PW-1B	SW 4810	
	4273-PW-1C	SW 4811	
	4273-PW-2	SW 4812	
	4273-PW-3	SW 4813	
	4273-PW-4	SW 4814	
	4273-PW-5	SW 4815	
	4273-PW-6	SW 4816	
	4273-PW-7	SW 4817	
	4273-PW-8	SW 4818	

alyst Date Rec'd 11/5/91 Date Reported

Proj. No.	Project Name			Number of Containers	Type of Sample	Matrix	Remarks
4273	IDAHO POLE CO.						
Samplers (signature) and Organization J. MICHALETZ, SHWB							
Sample No.	Date	Time	Site Location				
4273-PW-1A	10/31/91	09:50	(RES 8)	1	Grab	GW	515.1
4273-PW-1B		10:15 PM	(RES 8)	1			
4273-PW-1C		"	(RES 8)	1			
4273-PW-2		10:15	(RES 2)	1			
4273-PW-3		11:20	(RES 7)	1			
4273-PW-4		11:40	(RES 4)	1			
4273-PW-5		12:05	(RES 3)	1			
4273-PW-6		12:45	(RES 5)	1			
4273-PW-7		14:25	(RES 1)	1			
4273-PW-8		14:40	(RES 9)	1			

Relinquished by(signature)	Date/Time	Received by(signature)	Name of Receiving Laboratory	
J. M. Michaletz	10/31/91 17:00	Douglas L. Miller	MDHSS CHEM. LAB BUREAU	11/5/91 0920
Relinquished by(signature)	Date/Time	Received by(signature)	Received for Laboratory by (signature)	Date / Time
Relinquished by(signature)	Date/Time	Received by(signature)	Seal Number / Means of Transport: GREYHOUND BUS	Date/Time Sent
Relinquished by(signature)	Date/Time	Received by(signature)	Sampling Witness(signature): J. Stiles, SHWB / Seal Condition	

Remarks: SEND RESULTS TO K. KIRLEY, SHWB

1st copy (white)-Agency copy 2nd copy (yellow)-Laboratory copy 3rd copy (pink)-Other copy

CHEMISTRY LABORATORY BUREAU
DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES

REPORT TO: Solid and Hazardous Waste Bureau

ATTENTION: Kevin Kirley

SUBJECT: Analytical results for Idaho Pole Co.

Laboratory #:	Sample # or ID:	Sample Description:
SW4809	4273-PW-1A	Aqueous
SW4810	4273-PW-1B	Aqueous
SW4811	4273-PW-1C	Aqueous
SW4812	4273-PW-2	Aqueous
SW4813	4273-PW-3	Aqueous
SW4814	4273-PW-4	Aqueous
SW4815	4273-PW-5	Aqueous
SW4816	4273-PW-6	Aqueous
SW4817	4273-PW-7	Aqueous
SW4818	4273-PW-8	Aqueous

SAMPLE HANDLING INFORMATION:

SAMPLES SUBMITTED BY:	Joe Michaletz
DATE SAMPLES COLLECTED:	10/31/91
DATE RECEIVED IN LABORATORY:	11/5/91
DATE REPORTED BY LABORATORY:	12/5/91
RESPONSIBILITY CODE:	# 4273

	LABORATORY #	PENTACHLOROPHENOL		SURROGATE SPIKE RECOVERY
RES 8	SW4809 (KITCHEN)	<.05	ug/L	65%
RES 8	SW4810 (BATHTUB)	.291	ug/L	70%
RES 8	SW4811 (OUTSIDE TAP)	62.7	ug/L	120%
RES 2	SW4812	<.05	ug/L	103%
RES 7	SW4813	<.05	ug/L	89%
RES 4	SW4814	<.05	ug/L	89%
RES 3	SW4815	<.05	ug/L	116%
RES 5	SW4816	<.05	ug/L	117%
RES 1	SW4817	<.05	ug/L	128%
RES 9	SW4818	<.05	ug/L	102%
	BLANK	<.05	ug/L	87%

METHOD:
EPA 515.1

QUALITY ASSURANCE:

1. A laboratory blank was extracted and analyzed, which resulted in no detectable amount of PCP.

2. 2,4-Dichlorophenylacetic acid was used as a surrogate spike in each sample and percent recovery was calculated.

3. Results were confirmed on two different GC columns.

4. Results for sample # SW4811 were confirmed on GCMS.

REPORT SUBMITTED BY:

Bradford A Towle

Bradford Towle
Chemist
CHEMISTRY LABORATORY BUREAU

ATTACHMENT B

Admin. Record: Yes_____No_____
Administrative Record #_____
Confidential: Yes _____No_____
Key Correspondence:_____

MSE, Inc. Corporate Office P.O. Box 4078 Butte, MT 59702 (406) 723-8213
Component Development and Integration Facility (CDIF) P.O. Box 3767 Butte, MT 59702 (406) 494-7100

92MSE-180

February 24, 1992

FEB 27 1992
Montana Department of Health
and Environmental Sciences
Solid and Hazardous Waste Bureau

Mr. Kevin Kirley
Solid and Hazardous
Waste Bureau, MDHES
Cogswell Bldg.
Helena, MT 59620

Dear Kevin:

I have completed the validation of Idaho Pole Company Residential Groundwater for the month of December. The data was of acceptable quality and required no qualification.

Attached is the validation checklist (Attachment A) for this data package. Throughout the initial validation effort, I have been in contact with Brad Towle and John Hawthorne. Both have been very cooperative and forthecoming -- making my job much easier.

Also, attached is a list of items (Attachment B) we will need to include in the data packages for future sampling efforts. Since our meeting in January, the list of requirements for validation (that I provided you) has been somewhat updated to ensure that monitoring data is directly comparable to the data gathered during the RI/FS.

If you would like to discuss the data validation, or any of the items in Attachment B, please call me at 494-1502.

Sincerely,

Patrick Seccomb

Patrick Seccomb
Environmental/Analytical Chemist

PS/cj

Attachments

cc: Jay Cornish
Bill Bullock

Attachment A: Validation Checklist

MDHES - Idaho Pole Residential Well Monitoring

Holding:

All sampels extracted/analyzed within hodling time as per conversation January 24, 1992.

Calibration:

R = ok
Retention Window Definition = acceptable\
Acceptable

Blank:

No targets
Surrogate = 87%
Raw Data Confirms

Lab Check Sample:

% Recovery = 97.4
Raw Data Confirms

Surrogate Recoveries:

All recoveries meet acceptance criteria
Raw Data Confirms

Internal Standard Recoveries:

Recoveries meet area limits
Raw Data Confirms

Sample Verification:

PW - 1A
No PCP detected
Raw Data Confirms

PW - 1B
0.291 mg/L PCP
Raw (both Quant. & Conf.) Confirm
Average of two runs

PW - 1C
62.7 mg/L PCP
Raw Data Confirms

PW - 2
<0.05 mg/L PCP
Raw Data Confirms

PW - 3
<0.05 mg/L PCP
Raw Data Confirms

PW - 4
<0.05 mg/L PCP
Raw Data Confirms

PW - 5
<0.05 mg/L PCP
Raw Data Confirms

PW - 6
<0.05 mg/L PCP
Raw Data Confirms

PW - 7
<0.05 mg/L PCP
Raw Data Confirms

PW - 8
<0.05 mg/L PCP
Raw Data Confirms

Overall Assessment of Data:

The data is acceptable without qualification.

Attachment B: Special Note

For the future sampling events could we add the following to the data package:

1. A summary page for laboratory control sample results;
2. An internal standard summary page; and
3. A matrix spike and matrix spike duplicate, and a summary page for them.